

# EXHIBIT I

UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF MICHIGAN  
SOUTHERN DIVISION

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PETTER INVESTMENTS, INC.

Plaintiff,

v.

Case No. 1:11-CV-207

HYDRO ENGINEERING, INC., and  
HYDRO ENGINEERING  
EQUIPMENT & SUPPLY CO.

HON. GORDON J. QUIST

Defendants.

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**CLAIM CONSTRUCTION MEMORANDUM**  
**Re: "Impervious Top" and "Side/Edge"**

**Background**

This is the second of two lawsuits between Plaintiff, Petter Investments, Inc. ("Petter"), and Defendants, Hydro Engineering, Inc. and Hydro Engineering & Supply Co. ("Hydro"), involving alleged infringement of Hydro's Patents, U.S. Patent Nos. 6,799,591 and 7,258,749 (the "'591" and "'749" Patents, respectively). Petter also seeks in the present case declaratory judgments of noninfringement of Hydro's U.S. Patent Nos. 7,540,295 and 7,530,362 (respectively, the "'295" and "'362" Patents), which are continuations of the '591 and '749 Patents.<sup>1</sup>

The parties are familiar with the details and history of the prior case, *Petter Investments, Inc. v. Hydro Engineering, Inc., et al.*, No. 1:07-CV-1033 (the "2007 Case"), and the Court will not restate them except as necessary to its analysis. Relevant to the instant matter, however, after

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<sup>1</sup>Recently, the Court denied Hydro's motions to dismiss Petter's claims for declaratory judgment of noninfringement of the '295 and '362 Patents. The Court rejected Hydro's argument that no case or controversy existed with regard to those two patents. However, the Court granted Hydro's motions to dismiss Petter's claims for declaratory judgment of invalidity with regard to the '295 and '362 Patents, concluding that Petter was legally estopped by the Settlement Agreement in the 2007 Case from challenging the validity of those patents.

construing the disputed claim terms of the '591 and '749 Patents in the 2007 Case, the Court granted summary judgment to Hydro on Petter's invalidity defenses. In its September 8, 2009, Opinion, the Court rejected Petter's arguments that Petter's '792 Patent anticipated the '591 and '749 Patents. The essential dispute was whether the impervious top disclosed by Hydro's patents must be a "top surface" or merely a "top section" of the wash pad. (2007 Case, Dkt. no. 277 at 7.) The Court concluded that an impervious top as used in the '591 Patent means the upper surface of the wash pad, i.e., the "impervious top surface" referred to in claim 1 of the '749 Patent. (*Id.* at 8.) The Court thus rejected Petter's assertion that its patent discloses an "impervious top with ridges and grooves" because the top of Petter's wash pad – a grate – is not impervious, and the tray – which is impervious – is not a top because it is located below the structure supporting the top. (*Id.* at 10.) Similarly, the Court rejected Petter's argument that Hydro's patents were obvious in light of Petter's '792 Patent, the Gross Application, and other prior art references. As with Petter's anticipation argument, the Court concluded that neither Petter's patent nor the Gross Application disclosed a wash pad with an impervious top and, therefore, Hydro's patents were not obvious in light of the prior art. (*Id.* at 14-15.)

The '591 Patent describes a wash pad containment system that includes "an elevated, fluid impervious surface upon which an item is positioned to be washed." ('591 Patent, col. 2, ll. 24-25.) The wash pad is configured to allow the spent wash fluid and debris to flow to the edge of the pad surface and into a containment or collecting trough. (*Id.*, col. 2, ll. 25-26, 30-38.) The impervious top design improves on prior wash pad designs, which usually employ an open top holding tank or pan, with a grate for the washing surface, by allowing removal of solids and other debris without the necessity of removing the grate or interrupting the washing process. (*Id.*, col. 1, ll. 46-57, col. 2, ll. 3-5, 60-66.) The '591 Patent cites the wash pad disclosed in Petter's '792 Patent as an example

of a prior grated wash rack. Unlike Petter's prior design, "[s]ince the wash fluid with solids flows to the side of the surface rather than being collected under the surface, and are collected in an easily accessible and cleanable collecting trough, [Hydro's pad] is easy to clean and remove the solids." (*Id.*, col. 6, ll. 19-23.) In the preferred embodiment, the impervious surface has a plurality of "supporting rails" which support the vehicle or equipment to be washed, and a plurality of sloped "fluid flow channels" between such rails which accommodate the flow of wash fluid and debris toward and into the collecting trough. (*Id.*, col. 2, ll. 49-60.) The specification further explains:

The elevated surface may take many forms such as a flat or embossed surface. In a preferred form of the invention, as illustrated, the elevated surface 9 of a wash pad 10 of the invention includes a plurality of supporting rails 11 and a plurality of fluid flow channels 12. Each supporting rail 11 has a fluid flow channel 12 between it and the next adjacent rails. The supporting rails 11 and fluid flow channels 12 together form a substantially fluid impervious surface upon which an item to be washed is placed, supported by the supporting rails on which the item rests. . . .

The surface is supported in elevated position by structural channels 25 to which wide center pans 26 and narrow end pan 27 are secured.

(*Id.*, col. 4, ll. 17-26, 37-39.)

The '749 Patent describes a method of using the invention claimed in the '591 patent wherein the fluid and debris from the vehicle or equipment fall onto the top impervious surface of the pad and are directed across the impervious top surface to the edge of the pad and into the side trough.

#### **Claim Construction Rules**

Construction of patent claims is a matter of law. *See Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454-56 (Fed. Cir. 1998) (en banc). When there is a dispute regarding the meaning of language used in a claim, the court must ascertain the scope of the exclusive rights claimed in the patent. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), *aff'd*

517 U.S. 370, 116 S. Ct. 1384 (1996). Proper claim construction begins with the language of the claims themselves. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Claim terms should be given their ordinary and customary meaning as they would be understood by “a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). This “starting point is based on the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art.” *Id.*

The written description is also important “because it is relevant not only to aid in the claim construction analysis, but also to determine if the presumption of ordinary and customary meaning is rebutted.” *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298 (Fed. Cir. 2003). In fact, the specification is usually “the single best guide to the meaning of a disputed term.” *Vitronics*, 90 F.3d at 1582. The prosecution history is also useful because it may “inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Phillips*, 415 F.3d at 1317.

A court may also resort to extrinsic evidence, such as dictionaries, treatises, and expert or inventor testimony. *See id.* However, because it is created contemporaneously with the claims, intrinsic evidence, i.e., the specification and prosecution history, is generally more reliable and thus entitled to greater weight. *See id.* at 1320-21.

Although both intrinsic and extrinsic evidence may be used to divine the correct meaning, “the court’s focus [must] remain[] on understanding how a person of ordinary skill in the art would understand the claim terms.” *Id.* at 1323. This means that the court should resist the temptation to

import limitations from the specification into the claims. *Id.* Thus, “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Id.* at 1316 (quoting *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1995)).

### Analysis

Hydro alleges that Petter infringes claims 1 and 15 of the ‘591 Patent and claims 2 and 3 of the ‘749 Patent. Petter asserts noninfringement of those claims of the ‘591 and ‘749 Patents, as well as noninfringement of the ‘295 and ‘362 Patents. The disputed claim terms, “impervious top” (or similar variations) and side/edge appear in claims 1 and 15 of the ‘591 Patent and claims 2 and 3 of the ‘749 Patent.

During claim construction in the 2007 Case, the Court construed the terms “ridges” and “sloped grooves” in claim 1 of the ‘591 Patent. The Court construed “ridges” to mean “the top, upper, or crest portions of the impervious top” and “sloped grooves” to mean “channels or hollows in the impervious top deviating from the horizontal.” (2007 Case, Dkt. no. 154-2 at 6.) In addition, while the Court did not formally construe the terms, the Court concluded that “impervious” means “not permitting penetration or passage; impenetrable,” (2007 Case, Dkt. no. 329 at 10), and that “top” means “the upper surface of the wash pad.” (2007 Case, Dkt. no. 277 at 9.) The parties agree that the Court’s definitions of “impervious” and “top” are correct.

### ***“Impervious Top”***

Petter contends that the proper construction of “impervious top” is **“the upper surface of the wash pad where the surface is the outermost boundary (or one of the boundaries) of any material body, immediately adjacent to the air or empty space, or to another body.”** (Pl.’s Claim Constr. Br. at 13.) Petter’s proposed construction is based, in part, on the Court’s ruling in

the invalidity opinion in the 2007 Case that “top” refers to the to the top surface and not a top section of the wash pad. Petter argues that the Court should augment and clarify that prior construction with the ordinary and customary meaning of the term “surface,” citing a definition from The Random House College Dictionary. This is the approach the Court followed in its Opinion denying Hydro’s second motion for contempt in the 2007 Case, which it has since reconsidered. (2007 Case, Docket nos. 417, 437.)

Hydro contends that based upon the Court’s previous constructions as well as the intrinsic record of the patents, “impervious top” refers to **“the upper surface of the wash pad resting upon the support structures, which can comprise a combination of elements to create upper and lower portions of the surface.”** Hydro argues that the intrinsic record, as well as the Court’s prior claim constructions and rulings in the 2007 Case, establish that the impervious top is not merely the one-dimensional, planar upper surface of the wash pad, but instead can be a three-dimensional structure having depth. Hydro notes that the Court’s prior constructions of “ridges” and “grooves” implies that the impervious top is a three-dimensional surface. (Def.’s Claim Construction Br. at 6.) Hydro further notes that the specification of the ‘591 Patent discloses that the impervious top is the structure or combination of structures resting on the support elements. (*Id.*)

The invalidity opinion in the 2007 Case concluded that the term “top” as used in the ‘591 Patent refers to the top surface of the wash pad rather than a top section of the wash pad. The scope of that ruling, as explained above, was limited. The Court only addressed and rejected Petter’s claim that its grated wash pad disclosed in the ‘792 Patent, and other similar prior art using a grated vehicle support surface and a substructure to collect the wash fluid, disclosed an impervious top. Because the prior art disclosed an impervious structure below the support members that could not be considered the top, the Court had no reason to further consider the meaning of “impervious top.”

Claims 1 and 15 of the '591 Patent teach that the impervious top can be three dimensional because the top surface has ridges, which support the vehicle, and sloped groves adjacent to and below the ridges that accommodate the flow of wash fluid toward the pad edge. ('591 Patent, col. 6, ll. 42-43; col. 7, ll. 29-35.) The Court's prior construction of "ridges" and "sloped groves" proves this point as well, as ridges are the top, upper, or crest portions of the impervious top and sloped grooves are channels or hollows in the impervious top deviating from the horizontal. In other words, the grooves are, in a sense, carved out of the top. Moreover, the patent discloses that the impervious top surface can be made from a combination of elements creating upper and lower portions. (*Id.*, col. 4, ll. 23-26 ("The supporting rails 11 and fluid flow channels 12 together form a substantially fluid impervious surface upon which an item to be washed is placed, supported by the supporting rails on which the item is placed."); col. 4, ll. 37-39 (stating that the surface consists of "wide center pans 26 and narrow end pan 27 . . . on which rails 11 are secured"); col. 7, ll. 4-6 ("A low profile pad according to claim 1 where the impervious top is comprised of a plurality of modules joined together.").)

The preferred embodiment also discloses that the top surface is the elevated impervious structure resting on and attached to the supporting structural channels: "The surface is supported in elevated position by structural channels 25 to which wide center pans 26 and narrow end pan 27 are secured and on which rails 11 are secured." (*Id.*, col. 4, ll. 37-39; '749 Patent, col., ll. 5-6 (describing "a vehicle supporting top above the base").) Construing the term "impervious top" as comprising either a one-dimensional or three-dimensional surface is also consistent with the purpose of the '591 Patent. As noted above, the inventors sought to address the problems created by prior grated-top wash pad systems, in which the water was collected below the pervious washing surface, by employing an impervious top washing surface that would direct the wash fluid and debris to the



side of the wash pad. (*Id.*, col. 6, ll. 19-23 (“Since the wash fluid with solids flows to the side of the surface rather than being collected under the surface, and are collected in an easily accessible and cleanable trough, it is easy to clean and remove the solids.”).)

Petter’s reliance on the invalidity opinion and a dictionary definition to clarify the meaning of “upper surface” improperly ignores the intrinsic record, which informs the meaning of impervious top. Moreover, as indicated above, the prior invalidity opinion is useful as a point of reference on prior rulings, but it is not controlling on the construction of impervious top because the Court had no need to consider the precise issue of what constitutes an impervious top surface.

In light of the pertinent portions of intrinsic record, the proper construction of impervious top is the **impervious structure resting on the support base that can consist of a combination of elements with upper and lower portions.**

***“Side/Edge”***

Hydro contends that the terms “side” and “edge” are used in their ordinary sense and refer to **“the side or edge of the wash surface on which the vehicle being washed is resting, despite other components that may be on the other side of the trough.”** Hydro relies on the specification, the prosecution history, and the claims themselves for this construction. Petter contends that the terms “side” or “edge” mean **“the peripheral edge of the wash pad, which is the surface upon which vehicles or other items to be washed rests.”** Petter notes that the specification and claims of the ‘591 Patent, as well as this Court’s prior opinions in the 2007 Case, establish that the side or edge refers to the side or edge of the wash pad upon which the vehicle is placed for washing.

The principal aim of the ‘591 Patent is to address problems with prior grated wash pads resulting from the location of collection tanks or trays directly beneath the cleaning surface. (‘591

Patent col. 1, ll. 53-57 ; col. 2, ll. 3-9.) Describing the invention, the specification states that it includes “an elevated, fluid impervious surface upon which an item is positioned to be washed” and “[a] collecting trough [] located along the edge or edges of the surface to which the fluid flows.” (*Id.* col. 2, ll. 24-25, 34-36; *see also* col. 3, ll. 63-67 - col. 4, l. 1 (“The device provides an elevated, substantially water impervious surface upon which items to be washed are positioned. Any wash fluid . . . will flow from the item onto the surface and be directed to a side of the surface.”).) It further explains that “[s]ince the collecting trough is located along the side of the device it is easily accessible for cleaning and solids removal during the use of the device.” (*Id.* col. 2, ll. 60-62.) The prosecution history is consistent with the specification. During the prosecution, Hydro distinguished its invention from three prior art references, Lamminen, Gross, and Ferre, on the basis that all three references disclosed the use of a central trough underneath the vehicle, precluding access for cleaning during use of the device. For example, regarding Gross, Hydro pointed out that Hydro’s invention uses “an edge trough which is transversely offset from the support surface of the vehicle so that vehicle washing may continue to occur as the trough is cleaned.” (Defs.’ Claim Constr. Br. Ex. H at 11-12.) Finally, the claims themselves refer to the edge or side of the wash pad, in the ordinary sense. For example, claim 1 of the ‘591 Patent discloses a wash pad surface “structurally supporting the vehicle to be washed” and a “trough at an edge of the pad . . . from which stored liquid and debris are selectively removed . . . without interference with any cleaning taking place on the pad.” (‘591 Patent col. 6, ll. 44-54.)

The Court notes that the parties’ proposed constructions are substantially similar, recognizing that side and edge both refer to the side or edge of the pad upon which the vehicle is placed for washing. The dispute concerns Hydro’s additional language rendering additional components or material on the other side of the trough irrelevant to the claimed invention. In the Court’s judgment,

this understanding is implied from the claim language. That is, all that is required is a pad upon which a vehicle can be washed and a trough at one side or edge of the pad. The existence of components on the other side of the trough is irrelevant. Therefore, edge or side, as used in Hydro's patents, means **the side or edge of the wash pad on which the vehicle is placed for washing, regardless of any other components or material located on the other side of the trough.**

Dated: November 16, 2011

/s/ Gordon J. Quist  
GORDON J. QUIST  
UNITED STATES DISTRICT JUDGE